

IN THE CLAIMS

The text of all claims under examination is submitted, and the status of each is identified. This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (original): polymeric surfactant formed by the reaction of an oligomeric or polymeric substrate with at least one ethylenically unsaturated monomer, wherein the reaction is conducted in the presence of a type II photo initiator and by the action of actinic radiation.

2. (original): A polymeric surfactant according to claim 1, which is an amphiphilic polymer.

3. (currently amended): A polymeric surfactant according to claim 1 ~~or claim 2~~, which is water-soluble.

4. (currently amended): A polymeric surfactant according to ~~any of claims~~ claim 1 to 3, which is oil soluble.

5. (currently amended): A polymeric surfactant according to ~~any of claims~~ claim 1 to 4, which has a molecular weight below 100,000, ~~preferably below 50,000~~.

6. (currently amended): A polymeric surfactant according to ~~any of claims~~ claim 1 to 5, in which the substrate is selected from the group consisting of polyalkylene oxides, polyalkylene glycols, (meth) acrylamide polymers, (meth) acrylic acid polymers (esters or salts thereof), polyvinyl alcohol, polyvinyl acetate, polyvinylpyrrolidone, polyethylenimine, polyesters, polyamides, sugars, polysaccharides, amino acids, proteins and inorganic substances containing abstractable hydrogen.

7. (currently amended): A polymeric surfactant according to ~~any of claims~~ claim 1 to 6, in which the monomer comprises any one of acrylic, vinylic and allylic monomers.

8. (currently amended): A polymeric surfactant according to ~~any of claims~~ claim 1 to 7, in which the monomer comprises any of the group consisting of (meth) acrylamides, N-vinyl pyrrolidone, hydroxy ethyl acrylate, (meth) acrylic acid or salts thereof, maleic acid or salts thereof, itaconic acid or salts thereof, 2-acrylamido-2-methyl propane sulfonic acid or salts thereof, vinyl sulfonic acid, allyl sulfonic acid, dialkyl amino alkyl (meth) acrylates or quaternary ammonium or acid addition salts thereof,

dialkyl amino alkyl (meth) acrylamides or quaternary ammonium or acid addition salts thereof, diallyl dialkyl ammonium halide, styrenes, C1-30 alkyl (meth) acrylates and (meth) acrylonitrile.

9. (currently amended): A polymeric surfactant according to ~~any of claims~~ claim 1 to 8, in which the photoinitiator comprises one or more compounds selected from the group consisting of benzophenone, diaryl ketones, xanthenes, thioxanthenes, acridones, anthraquinones, diketones, 2-ketocoumarins, and imides.

10. (currently amended): A polymeric surfactant according to ~~any of claims~~ claim 1 to 9, in which the actinic radiation is selected from ultraviolet light, infrared light, and visible light.

11. (currently amended): A method of producing a polymeric surfactant comprising contacting an oligomeric or polymeric substrate with at least one ethylenically unsaturated monomer and a type II photo initiator to form a reaction mixture and wherein the reaction mixture is subject to actinic radiation to induce grafting of monomer onto the substrate and photo polymerisation to form a polymeric surfactant.

12. (currently amended): A method according to claim 11 in which the reaction mixture is dissolved or dispersed in a liquid medium.

13. (currently amended): A method according to claim 12 in which the liquid medium is selected from the group consisting of methanol, toluene, cyclohexane, acetonitrile, dimethylformamide and water.

14-15. (cancelled).

16. (original): A composition comprising a discontinuous phase distributed throughout a continuous phase comprising an interface between phases and in which a polymeric surfactant is located at the interface,

in which the polymeric surfactant is formed by the reaction of an oligomeric or polymeric substrate with at least one ethylenically unsaturated monomer, wherein the reaction is conducted in the presence of a type II photo initiator and by the action of actinic radiation.

17. (cancelled).

18. (currently amended): A composition according to claim ~~16 or claim 17~~ in which the continuous phase comprises a hydrocarbon or a water immiscible liquid.

19. (currently amended): A composition according to ~~any of claims~~ claim ~~16 to 18~~ in which the discontinuous phase is aqueous.

20. (currently amended): A composition according to claim ~~16 or claim 17~~ in which the continuous phase is aqueous.

21-24. (cancelled).

25. (currently amended): A composition according to any of claims ~~16 to 23~~ which is an aqueous emulsion paint.

26-28. (cancelled).

29. (currently amended): A composition according to any of claims ~~16 to 28~~ in which the discontinuous phase comprises a particulate solid.

30. (cancelled).

31. (currently amended): A composition according to claim ~~29 or claim 30~~ which is selected from the group consisting of filler dispersions, microparticulate retention aid dispersions, drilling muds and pigment dispersions.

32-33. (cancelled).